In the claims:

1. (Original) A composition suitable for administration to a patient for treating a neoplasm, said composition comprising:

(a) a biocompatible polymer having phosphorous-based linkages; and

(b) one or more radiosensitizers in an aggregate amount equal to at least five percent by weight of said composition,

wherein a single dose of said composition provides extended release of at least one of said radiosensitizers over a period of at least about one day, and

wherein said composition is effective to inhibit the growth of said neoplasm upon (i) administration of said composition to said patient such that said composition is in at least partial contact with said neoplasm or tissue surrounding the site of said neoplasm, and (ii) subsequent treatment of said patient with electromagnetic radiation.

2. (Original) The composition of claim 1, wherein said amount is at least about 10% by weight of said composition.

3. (Original) The composition of claim 1, wherein said inhibition of said growth of said neoplasm is measured as a delay in doubling time as compared to no treatment.

4. (Original) The composition of claim 3, wherein said amount is at least about 10% by weight of said composition and wherein said doubling time is extended by a factor of at least about two.

5. (Original) The composition of claim 3, wherein said amount is at least about 30% by weight of said composition and wherein said doubling time is extended by a factor of at least about two.

6. (Original) The composition of claim 3, wherein said amount is at least about 20% by weight of said composition and wherein said doubling time is extended by a factor of at least about three.

7. (Original) The composition of claim 4, wherein said doubling time is extended by a factor of at least about four.

8. (Original) The composition of claim 1, wherein said inhibition of said growth of said neoplasm is measured by a reduction in the volume of said neoplasm as compared to no treatment on a date approximately thirty days after administration of said composition.

9. (Original) The composition of claim 8, wherein said amount is at least about 20% by weight of said composition and wherein said reduction in said volume is at least about 10%.

10. (Original) The composition of claim 8, wherein said reduction in said volume is at least about 10% on a date approximately sixty days after said administration.

11. (Original) The composition of claim 8, wherein said amount is at least about 30% by weight of said composition and wherein said reduction in said volume is at least about 30%.

12. (Original) The composition of claim 8, wherein said reduction in said volume is at least about 30% on a date approximately sixty days after said administration.

13. (Original) The composition of claim 8, wherein said reduction in said volume is at least about 50%.

14. (Original) The composition of claim 8, wherein said reduction in said volume is at least about 70%.

15. (Original) The composition of claim 2, wherein a single dose of said composition provides extended release of at least one of said radiosensitizers over a period of at least about 15 days.

16. (Original) The composition of claim 1, wherein a single dose of said composition provides extended release of at least one of said radiosensitizers over a period of at least about 30 days.

17. (Original) The composition of claim 1, wherein said composition releases a therapeutically effective amount of at least one of said radiosensitizers over a period of at least about three growth cycles of said neoplasm.

18. (Original) The composition of claim 1, wherein said amount is at least about 30% by weight of said composition and wherein said composition releases a therapeutically effective amount of at least one of said radiosensitizers over a period of at least about three growth cycles of said neoplasm.

19. (Original) The composition of claim 1, wherein said amount is at least about 30% by weight of said composition.

20. (Original) The composition of claim 1, wherein the therapeutic index for a course of electromagnetic radiation for treating said neoplasm is at least about three times greater when said composition is administered to said patient before said course.

21. (Original) The composition of claim 2, wherein the ED_{50} for a course of electromagnetic radiation for treating said neoplasm is at least about three times greater when said composition is administered to said patient before said course.

22. (Original) The composition of claim 1, wherein said composition is in at least partial contact with said neoplasm or tissue surrounding the site of said neoplasm.

23. (Original) The composition of claim 1, wherein said composition is formulated as microspheres.

24. (Original) The composition of claim 23, wherein the mean diameter of said microspheres is less than about 250 microns.

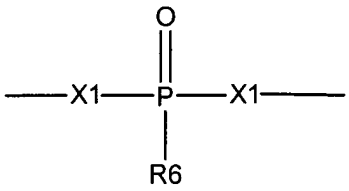
25. (Original) The composition of claim 23, wherein the mean diameter of said microspheres is less than about 100 microns.

26. (Original) The composition of claim 2, wherein said composition is formulated as a solid particle or rod.

27. (Original) The composition of claim 23, wherein said microspheres are mixed with a pharmaceutically acceptable carrier.

28. (Original) The composition of claim 1, wherein said polymer is biodegradable.

29. (Withdrawn) The composition of claim 1, wherein said polymer has five or more units represented by the following formula:



wherein, independently for each occurrence of said monomeric unit:

X1, each independently, represents -O- or -N(R5)-;

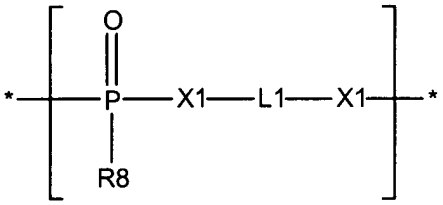
R5 represents -H, aryl, alkenyl or alkyl; and

R6 is any non-interfering substituent.

30. (Withdrawn) The composition of claim 29, wherein each occurrence of X1 for each of said units represents O.

31. (Withdrawn) The composition of claim 29, wherein each occurrence of R6 for each of said units represents H, alkyl, -O-alkyl, -O-cycloalkyl, aryl, -O-aryl, heterocycle or -O-heterocycle.

32. (Withdrawn) The composition of claim 2, wherein said polymer has two or more monomeric units represented by the following Formula V:



Formula V

wherein, independently for each occurrence of said monomeric unit:

X1, each independently, represents -O- or -N(R7)-;

R7 represents -H, aryl, alkenyl or alkyl;

L1 represents any chemical moiety that does not materially interfere with the biocompatibility of said polymer;

R8 represents -H, alkyl, -O-alkyl, -O-cycloalkyl, aryl, -O-aryl, heterocycle, -O-heterocycle, or -N(R9)R10;

R9 and R10, each independently, represent a hydrogen, an alkyl, an alkenyl, -$(CH_2)_m$-R11, or R9 and R10, taken together with the N atom to which they are attached complete a heterocycle having from 4 to about 8 atoms in the ring structure;

m represents an integer in the range of 0-10; and

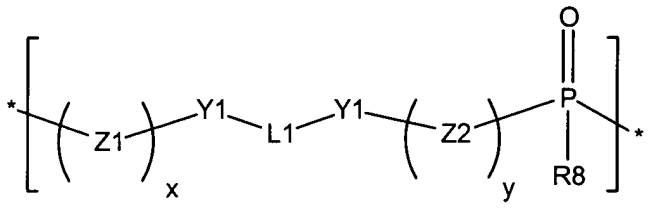
R11 represents -H, alkyl, aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle.

33. (Withdrawn) The composition of claim 32, wherein said polymer comprises at least about five of said monomeric units.

34. (Withdrawn) The composition of claim 33, wherein all X1 are O.

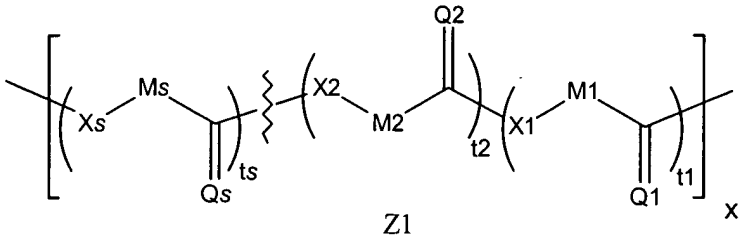
35. (Withdrawn) The composition of claim 34, wherein L1 for at least a plurality of said units has 2 to about 20 atoms of carbon, oxygen, sulfur and nitrogen, wherein at least 60 percent of said atoms are carbon.

36. (Currently Amended) The composition of claim 1, wherein said polymer has one or more monomeric units represented by the following Formula VI:

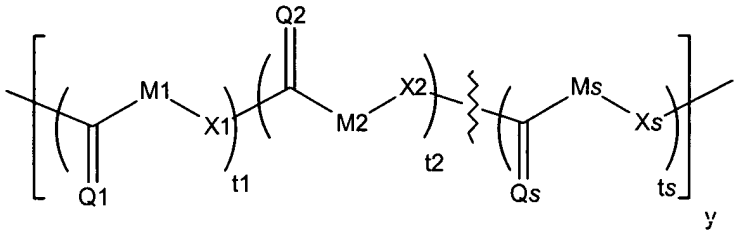


Formula VI

wherein Z1 and Z2, respectively, for each independent occurrence is:



Z1



Z2

wherein, independently for each occurrence of said monomeric unit:

Q1, Q2 ... Q*s*, each independently, represent -O- or -N(R7);

X1, X2 ... X*s*, each independently, represent -O- or -N(R7);

R7 represents -H, aryl, alkenyl or alkyl;

the sum of t1, t2 ... t*s* is an integer and equal to at least one or more;

Y1 represents -O-, -S- or -N(R7)-;

x and y are each independently integers from 1 to about 1000 or more;

L1 represents ~~any chemical moiety that does not materially interfere with the biocompatibility of said polymer~~ a divalent branched or straight chain or cyclic aliphatic group or divalent aryl group;

M1, M2 ... M*s* each independently, represents ~~any chemical moiety that does not materially interfere with the biocompatibility of said polymer~~ a divalent aliphatic moiety having from 1 to about 7 carbon atoms;

R8 represents -H, alkyl, -O-alkyl, -O-cycloalkyl, aryl, -O-aryl, heterocycle, -O-heterocycle, or -N(R9)R10;

R9 and R10, each independently, represent a hydrogen, an alkyl, an alkenyl, -$(CH_2)_m$-R11, or R9 and R10, taken together with the N atom to which they are attached complete a heterocycle having from 4 to about 8 atoms in the ring structure;

m represents an integer in the range of 0-10; and

R11 represents -H, alkyl, aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle.

37. (Original) The composition of claim 36, wherein said monomeric units comprise at least about 95 percent of the repeating units of said polymer.

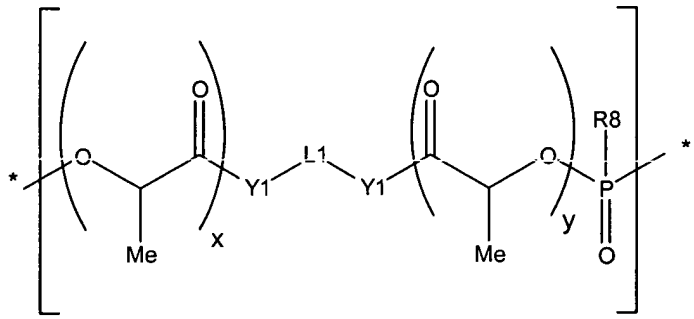
38. (Original) The composition of claim 37, wherein the average molar ratio of (x or y):L1, when t*s* is equal to one, is from about 10:1 to about 4:1.

39. (Canceled)

40. (Original) The composition of claim 37, wherein each Q1, Q2 ... Q*s* and each X1, X2 ... X*s* of each of said monomeric units of said polymer is O and the sum of t1, t2 ... t*s* equals one for each of Z1 and Z2.

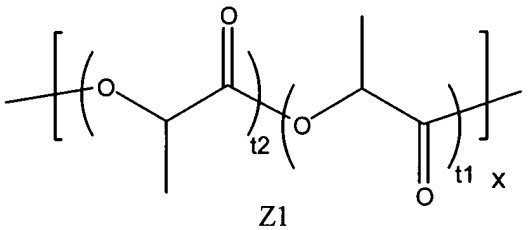
41. (Canceled)

42. (Withdrawn) The composition of claim 36, wherein said monomeric units are represented by the following Formula VIf:

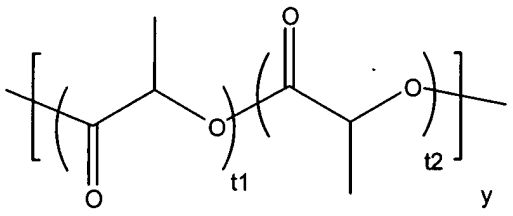


Formula VIf

43. (Original) The composition of claim 36, wherein each of Z1 and Z2 is represented by:



Z1

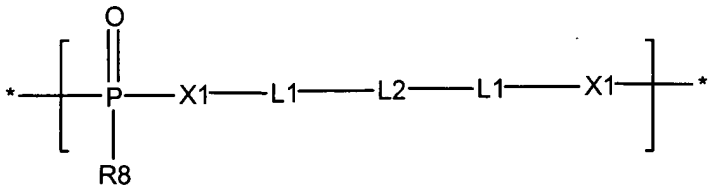


Z2

wherein the configuration of the chiral carbons independently for each unit x for Z1 and unit y for Z2 is either D for t1 and L for t2, or L for t1 and D for t2.

44. (Original) The composition of claim 43, wherein each of Y1 is O and L1 is -CH(CH3)CH2-.

45. (Withdrawn) The composition of claim 1, wherein said polymer has one or more monomeric units represented by the following Formula VII:



Formula VII

wherein, independently for each occurrence of said monomeric unit:

X1, each independently, represents -O- or -N(R7)-;

R7 represents -H, aryl, alkenyl or alkyl;

L1 represents any chemical moiety that does not materially interfere with the biocompatibility of said polymer;

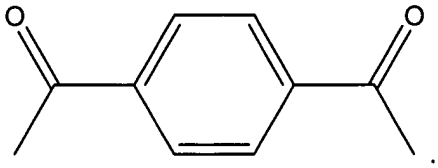
R8 represents -H, alkyl, -O-alkyl, -O-cycloalkyl, aryl, -O-aryl, heterocycle, -O-heterocycle, or -N(R9)R10;

R9 and R10, each independently, represent a hydrogen, an alkyl, an alkenyl, -$(CH_2)_m$-R11, or R9 and R10, taken together with the N atom to which they are attached complete a heterocycle having from 4 to about 8 atoms in the ring structure;

m represents an integer in the range of 0-10, preferably 0-6; and

R11 represents -H, alkyl, aryl, cycloalkyl, cycloalkenyl, heterocycle or polycycle; and

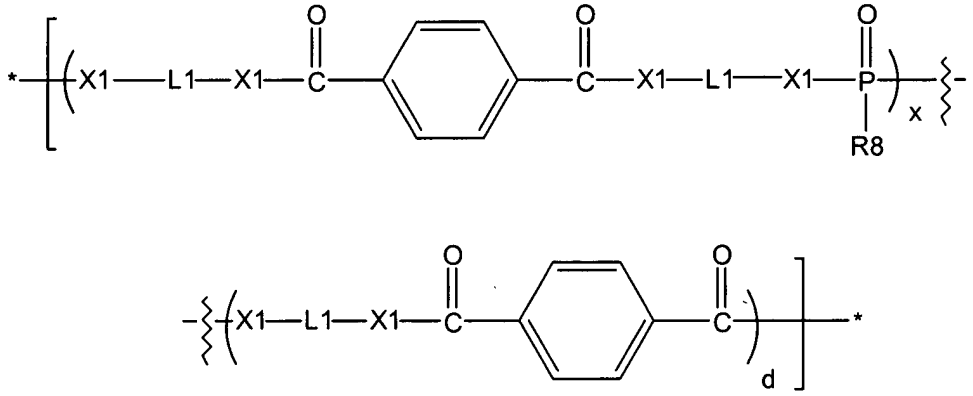
L2 represents a divalent, branched or straight chain aliphatic group, a divalent cycloaliphatic group, a phenylene group, or a group of the formula:



46. (Withdrawn) The composition of claim 45, wherein each of L1 is -CH_2-.

47. (Withdrawn) The composition of claim 46, wherein each X1 of each of said units is O.

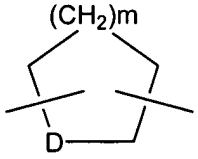
48. (Withdrawn) The composition of claim 45, wherein said polymer has one or more monomeric units represented by the following Formula VIII:



Formula VIII

wherein d is equal to one or more and x is equal to or greater than one.

49. (Withdrawn) The composition of claim 48, wherein each L1 independently represents an alkylene group, a cycloaliphatic group, a phenylene group or a divalent group of the formula:



wherein D is O, N or S and m is an integer from 0 to 3.

50. (Withdrawn) The composition of claim 1, wherein one of said radiosensitizers is a halogenated pyrimidine.

51. (Withdrawn) The composition of claim 50, wherein said halogenated pyrimidine is IUdR.

52. (Withdrawn) The composition of claim 1, wherein all of said radiosensitizers are a halogenated pyrimidine.

53. (Withdrawn) The composition of claim 52, wherein said halogenated pyrimidine is IUdR.

54. (Withdrawn) A method for treating unwanted cell proliferation of a subject, comprising: (a) administering to said subject a therapeutically effective amount of one of the compositions claimed above; and (b) treating said subject with electromagnetic radiation.

55. (Withdrawn) The method of claim 54, wherein said composition is administered by injection into a tumor arising from said unwanted cell proliferation.

56. (Withdrawn) The method of claim 54, wherein said composition is administered to an anatomic area resulting from removal of a tumor caused by said unwanted cell proliferation.

57. (Withdrawn) The method of claim 54, wherein said composition is inserted into said patient such that said composition is in at least partial contact with a tumor caused by said unwanted cell proliferation or tissue surrounding the site of said tumor.

58. (Withdrawn) The method of claim 54, wherein said composition is administered to the central nervous system.

59. (Withdrawn) The use of a composition in the manufacture of a medicament to treat or prevent a neoplastic growth in a subject, wherein said composition is one of the compositions claimed above.

60. (Original) A kit containing a drug delivery system, comprising (a) a composition claimed above, and (b) instructions for administering said composition to a subject with a neoplasm and a treatment of said subject with electromagnetic radiation following said administration.